### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024150 Address: 333 Burma Road **Date Inspected:** 25-May-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Liu Hua Jie. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG components.

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA Inspector observed and/or found the following:

Trial Assembly Yard:

This QA Inspector observed the following work in progress:

Blast Inspection:

OBG Seg 13AE:

Blast inspection was performed at the following locations:

Panel Point (PP) 117.5 and PP118 (only west side of PP118):

Bottom Panel SA3012A, Floor Beam (FB) 3104A (at PP117.5), Side Panel (SP) 3058A, SP3059A and SP3060A, RS3074C stiffeners on SP3058A, RS3072A stiffeners on SP3059A and SP3060A, Edge Beam (EB) 3009A and EB3009B and RS stiffeners (RS3065B) on SA3012A. Areas identified for additional grinding and / or welding were marked and were informed to ZPMC QC personnel. These areas were recorded on the drawings / weld maps and were submitted to the Lead Inspector for review and further disposition.

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OBG Seg 13AW and Seg 13BW:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: OBE13W-003 [Side Panel (SP) to SP, CJP splice weld]. The welder is identified as 037748 and was observed welding in 4G position. ZPMC Quality Control (QC) was identified as Hu Wei Gang. The welding variables recorded by this QC appeared to comply with welding procedure specification (WPS): B-P-2214-B-U2-FCM-1.

The SMAW process on weld joint no: OBW13B-001 [Bottom Panel (BP) to BP, CJP splice weld]. The welder is identified as 037748 and was observed welding in 4G position. ZPMC QC was identified as Hu Wei Gang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-B-U2-FCM-1.

OBG Seg 13AE and Seg 13BE:

Repair welding of weld joint no: OBE13E-002 [Deck Panel (DP) to DP, CJP splice weld]. The welder is identified as 068764 and was observed welding in the 4G position. Welding process was identified as SMAW. ZPMC QC was identified as Wang Liang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair-1. Repair welding was done as per Welding Repair Report (WRR): 21059 Rev-0.

**OBG Seg 13CE:** 

The SMAW process on weld joint no: CA3014-099 [DP to Edge Panel (EP), CJP weld]. The welder is identified as 066258 and was observed welding in 4G position. ZPMC QC was identified as Wang Liang. The welding variables recorded by this QC appeared to comply with WPS: B-P-2214-Tc-U4b-FCM-1.

OBG Seg 13AW:

Repair welding of weld joint no: Seg3013Q-261 [I-rib stiffener to Floor Beam, CJP weld]. The welder is identified as 045268 and was observed welding in the 4G position. Welding process was identified as SMAW. ZPMC QC was identified as Shen Jian Bo. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair-1. Repair welding was done as per Critical Welding Repair Report (CWR): 2962 Rev-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable Contract documents.

## **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

# **WELDING INSPECTION REPORT** ( Continued Page 3 of 3 )

Inspected By:	Wadkar, Sailesh	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer